



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandra, Virginia 22313-1450 www.uspto.gov

PLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/027,428	12/19/2001	Bernd Luebcke	P01,0372	1858	
26574	7590 06/19/2003				
SCHIFF HARDIN & WAITE			EXAMINER		
6600 SEARS 233 S WACE	KER DR		CRENSHAW, MARVIN P	, MARVIN P	
CHICAGO, IL 60606-6473			ART UNIT	PAPER NUMBER	
			2854	2854	
			DATE MAILED: 06/19/2003	DATE MAILED: 06/19/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Summers	10/027,428	LUEBCKE, BERND				
Office Action Summary	Examiner	Art Unit				
TI MAII (NA 2475 441	Marvin P. Crenshaw	2854				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status						
1) Responsive to communication(s) filed on 19 December 2001.						
2a)☐ This action is <b>FINAL</b> . 2b)⊠ Thi	s action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims						
4) Claim(s) 1-17 is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-17</u> is/are rejected.						
7) Claim(s) <u>1-11</u> is/are rejected. 7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>19 December 2001</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12)☐ The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a)⊠ All b)☐ Some * c)☐ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.						
Attachment(s)		·				
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5</li> </ol>	5) Notice of Informal F	r (PTO-413) Paper No(s) Patent Application (PTO-152)				
J.S. Patent and Trademark Office	<del> </del>	· · · · · · · · · · · · · · · · · ·				

Art Unit: 2854

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 – 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buechler in view of Kurz.

Buechler teaches a cooling device (Fig. 1) for cooling an engraving system of an engraving device for engraving printing forms comprising engraving head (30) carried by a support and a cooling unit (60 & 62) substantially complete in and of themselves, where one cooling unit is allocated to one engraving head.

However, Buechler doesn't teach having a plurality of cooling units each for cooling one engraving head. Kurz teaches having a plurality of cooling units (See col. 2 lines 4 - 35) each for cooling one printing unit. It would be obvious to provide Buechler with a plurality of cooling units each for cooling one engraving head as taught by Kurz so as to more efficiently provide cooling to the engraving system.

With respect to claims 2 and 11, Buechler doesn't teach a device wherein each cooling unit contains a heat exchanger with a heat pipe whose one end projects into a region of the device.

Art Unit: 2854

THE REAL PROPERTY AND PERSONS ASSESSED.

Kurz teaches a device wherein each cooling unit (12 and 14) contains a heat exchanger with a heat pipe (line flowing into water pan) whose one end projects into a region of the device. It would have been obvious to modify Buechler to have a heat exchanger wit a heat pipe as a cooling device as taught by Kurz for cooling means for cooling the engraving head of an engraving cylinder.

With respect to claim 3, Buechler teaches a cooling device wherein the heat pipes have a liquid medium (See Col. 5 lines 50 - 60) flowing there through.

With respect to claims 4 and 13, Buechler doesn't teach the heat pipes having a gaseous medium flowing through them. Kurz teaches the heat pipes having a gaseous medium (45) flowing through them.

It would have been obvious to modify Buechler to have the heat pipes having a gaseous medium flowing through them as taught by Kurz to have as another means for cooling the engraving heads.

With respect to claims 5 and 15, Buechler doesn't teach a cooling device employs a rapid action coupling (24) to connect at least two heat exchangers of the cooling device to another, at least one thereof being connected to the engraving system and they are attached to a support.

Kurz teaches a cooling device employs a rapid action coupling (24) to connect at least two heat exchangers of the cooling device to another, at least one thereof being connected to the engraving system and they are attached to a support.

Art Unit: 2854

It would have been obvious to modify Buechler to have a rapid action coupler as a connection means as taught by Kurz for switching means between the two heat exchangers.

With respect to claim 7, 14 and 16, Buechler doesn't teach a cooling device comprises at least one cooling circulation connecting at least two heat exchangers of the cooling device to one another at least one thereof being connected to the printing system.

Kurz teaches a cooling device comprises at least one cooling circulation connecting (68) at least two heat exchangers of the cooling device to one another at least one thereof being connected to the printing system.

It would have been obvious to modify Buechler to have a heat exchanger as a cooling device as taught by Kurz for cooling means for cooling the engraving head of an engraving cylinder.

With respect to claim 8 and 17, Buechler doesn't teach the cooling device is flooded with air.

Kurz teaches a cooling device is flooded with air (45). It would have been obvious to modify Buechler to have a cooling device flooded with air as taught by Kurz for another resource cooling means for cooling the engraving head of an engraving cylinder.

With respect to claim 9, Buechler teaches the engraving device (Fig. 1) comprises a printing form cylinder for rotogravure.

Art Unit: 2854

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marvin P. Crenshaw whose telephone number is (703) 308-0797. The examiner can normally be reached on Monday - Friday 7:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (703) 305-6619. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

**MPC** 

June 16, 2003

REN YAN PRIMARY EXAMINER

Ken Jan